

## 2011 Water Quality Data for the City of Chicago

### Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Level found	Range of detections	Violation	Date of Sample
<b><u>Microbial Contaminants</u></b>						
TURBIDITY (%<0.3 NTU) Soil runoff. Lowest monthly percent limit.	n/a	TT	99.50%	99.50%-100.000%		
TURBIDITY (NTU) Soil runoff. Highest single measurement.	n/a	TT=1NTUmax	0.86	n/a		
<b><u>Inorganic Contaminants</u></b>						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.0208	0.0201 - 0.0208		
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.44	0.39 - 0.44		
TOTAL NITRATE & NITRITE (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.44	0.39 - 0.44		
<b><u>State Regulated Contaminants</u></b>						
FLOURIDE (ppm) Water additive which promotes strong teeth	4	4	0.92	0.81 - 0.92		
<b><u>Radioactive Contaminants</u></b>						
COMBINED RADIUM (226/228) (pCi/L) Decay of natural and man-made deposits	0	5	1.38	1.300 - 1.380		03-17-2008
GROSS ALPHA excluding radon and uranium (pCi/L) Decay of natural and man-made deposits	0	15	0.88	0.090-0.880		03-17-2008
<b><u>Unregulated Contaminants</u></b>						
SULFATE (ppm) Erosion of naturally occurring deposits.	n/a	n/a	16.1	14.4—16.1		
SODIUM (ppm) Erosion of naturally occurring deposits. Used as water softener.	n/a	n/a	6.64	6.63-6.64		
TOC [TOTAL ORGANIC CARBON] The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by the IEPA						

### Water Quality Data Table Footnotes:

#### **TURBIDITY**

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

#### **UNREGULATED CONTAMINANTS:**

A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

#### **FLUORIDE**

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l.

#### **SODIUM**

There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to diet/dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

**UNREGULATED CONTAMINANT MONITORING RULE II (UCMR II):** Our water system was required to monitor for all contaminants required under the Unregulated Contaminant Monitoring Rule II (UCMR II). Started in 2009, monitoring under UCMR II was completed in 2011, with none of the contaminants detected. Inquiries and results may be obtained by calling the Water Quality Division office at (312) 742-7499.

### **2011 Violation Summary Table**

#### **Violation Description:**

**No drinking water quality violations were recorded during 2011**

## 2011 Water Quality Data for the Village of Broadview Regulated Contaminants Detected

**Lead and Copper****Date Sampled:** 6/7/11**Definitions:**

ALG (Action Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health.

AL (Action Level): The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow.

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	# of Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# Sites Over Copper AL	Likely Source of Contamination
0 ppb	15 ppb	10.6 ppb	0	1.3 ppm	1.3 ppm	0 ppm	0	Corrosion of household plumbing systems; Erosion of natural deposits

Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation?	Likely Source Of Contaminant
<b>Disinfectants &amp; Disinfection By-Products</b>								
Total Haloacetic Acids (HAA5)		17	17.1-17.1	ppb	n/a	60	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes]		50	51.5-51.5	ppb	n/a	80	No	By-product of drinking water chlorination
Chlorine	01/01/2011	1.00	0.804-1.153	ppm	MRDLG=4	MRDL=4	No	Water additive used to control microbes

Not all samples results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should be done in the future.

**Water Quality Test Results**

Definitions: The preceding tables contain scientific terms and measures, some of which may require explanation.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's do not reflect the health benefits of the use of disinfectants to control microbial contaminants.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

mg/l: milligrams per liter or parts per million—or one ounce in 7350 gallons of water.

ug/l: micrograms per liter or parts per billion—or one ounce in 7,350,000 gallons of water.

ppm: parts per million

ppb: parts per billion

n/a: not applicable.

Avg. Regulatory compliance with some MCLs are based on running annual average of monthly samples.

### Water Quality Data Definition of Terms Used

• **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

• **nd:** Not detectable at testing limits.

• **n/a:** Not applicable

• **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology

• **Level Found:** This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

• **Range of Detections:** This column represents a range of individual sample results; from lowest to highest that were collected during the CCR calendar year.

• **Date of Sample:** If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the CCR calendar year.

• **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

• **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Unit of Measurement;**

ppm - Parts per million, or milligrams per liter

ppb - Parts per billion, or micrograms per liter

NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

%&lt;0.5 NTU - Percent samples less than 0.5 NTU

pCi/l - picoCuries per liter (measurement of radioactivity)

ppt - Parts per trillion

### VIOLATION SUMMARY TABLE

*No drinking water quality violations were recorded during 2011*